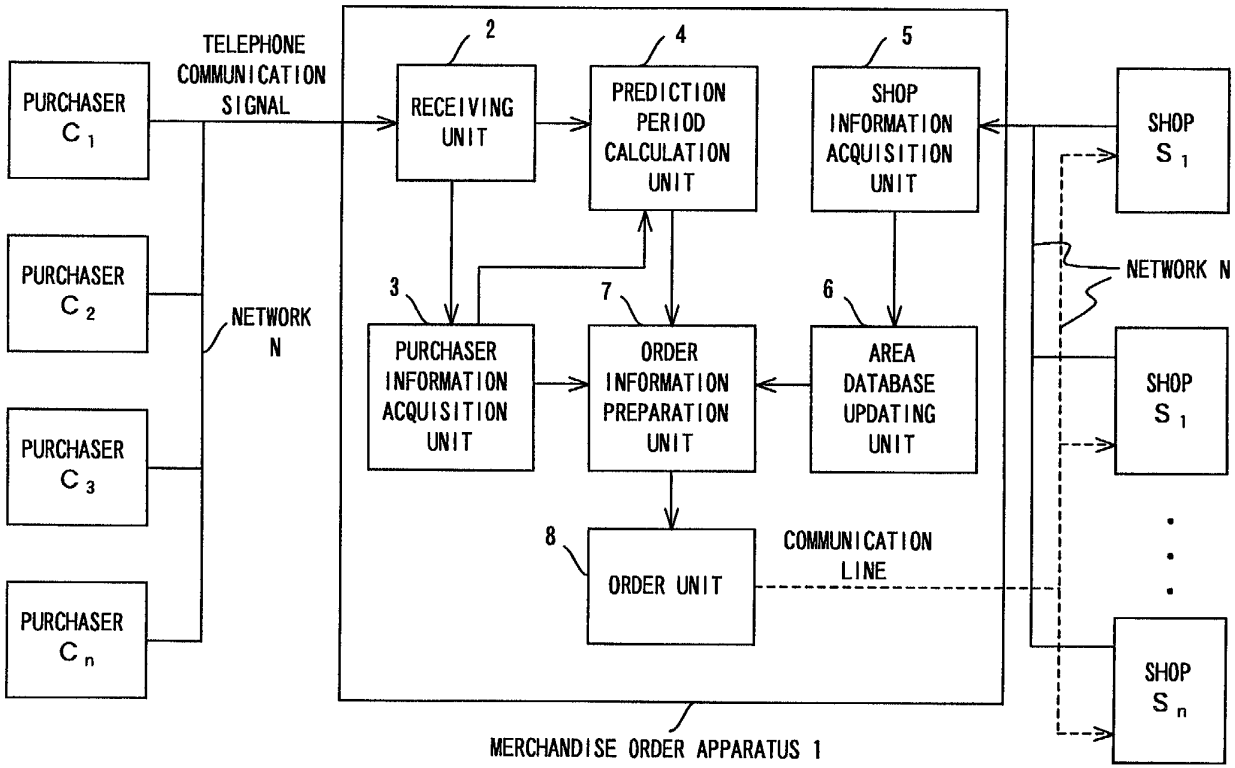


FIG. 1

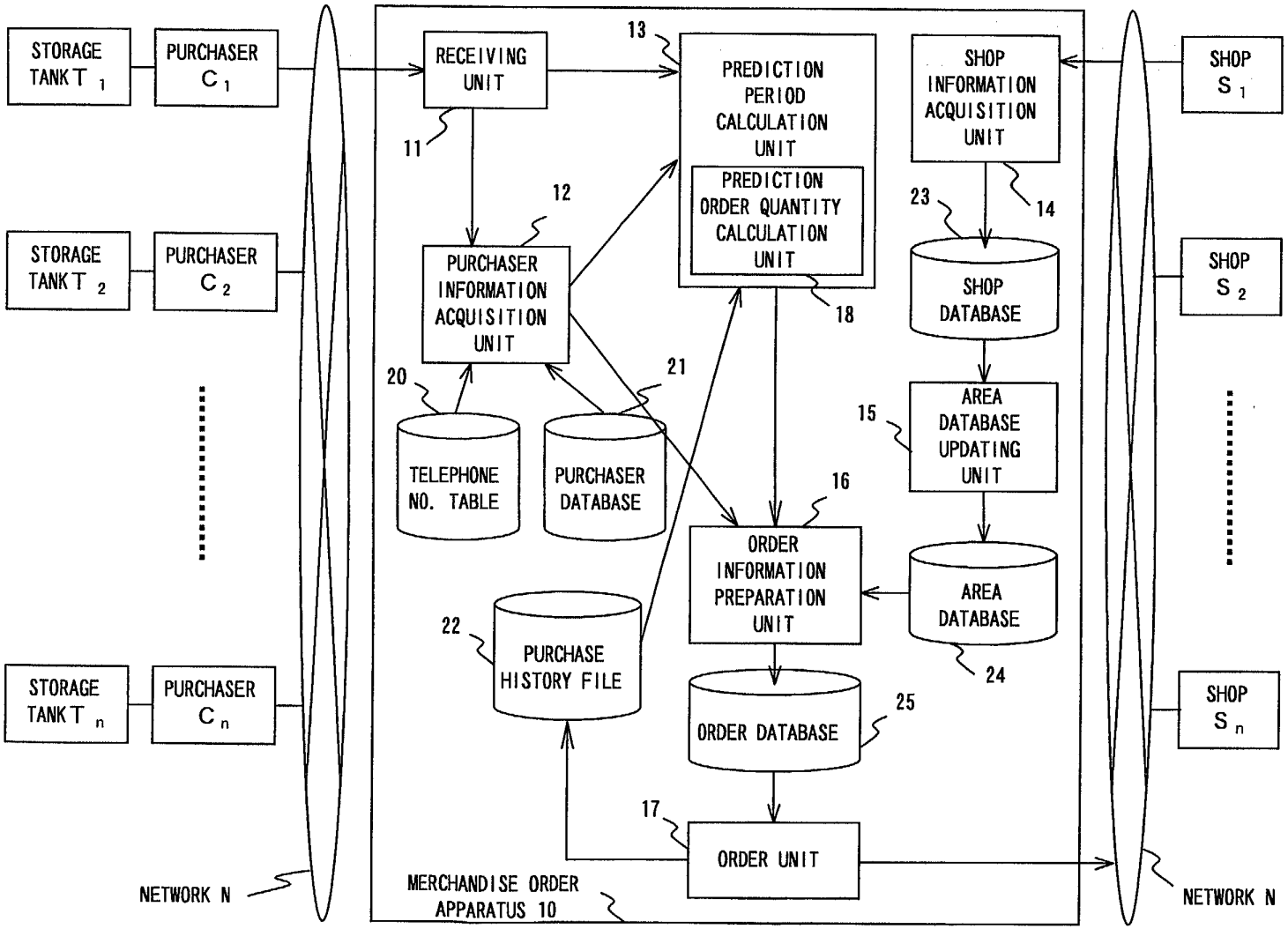

STORAGE TANK T 1
PURCHASER C 1
STORAGE TANK T 2
PURCHASER C 2
STORAGE TANK T n
PURCHASER C n
NETWORK N
RECEIVING UNIT
11
12
PURCHASER INFORMATION ACQUISITION UNIT
13
PREDICTION PERIOD CALCULATION UNIT
PREDICTION ORDER QUANTITY CALCULATION UNIT
18
20
TELEPHONE NO. TABLE
21
PURCHASER DATABASE
16
ORDER INFORMATION PREPARATION UNIT
22
PURCHASE HISTORY FILE
ORDER DATABASE
25
17
ORDER UNIT
MERCHANDISE ORDER APPARATUS 10
SHOP INFORMATION ACQUISITION UNIT
14
23
SHOP DATABASE
15
AREA DATABASE UPDATING UNIT
AREA DATABASE
24
SHOP S 1
SHOP S 2
SHOP S n
NETWORK N

FIG. 2

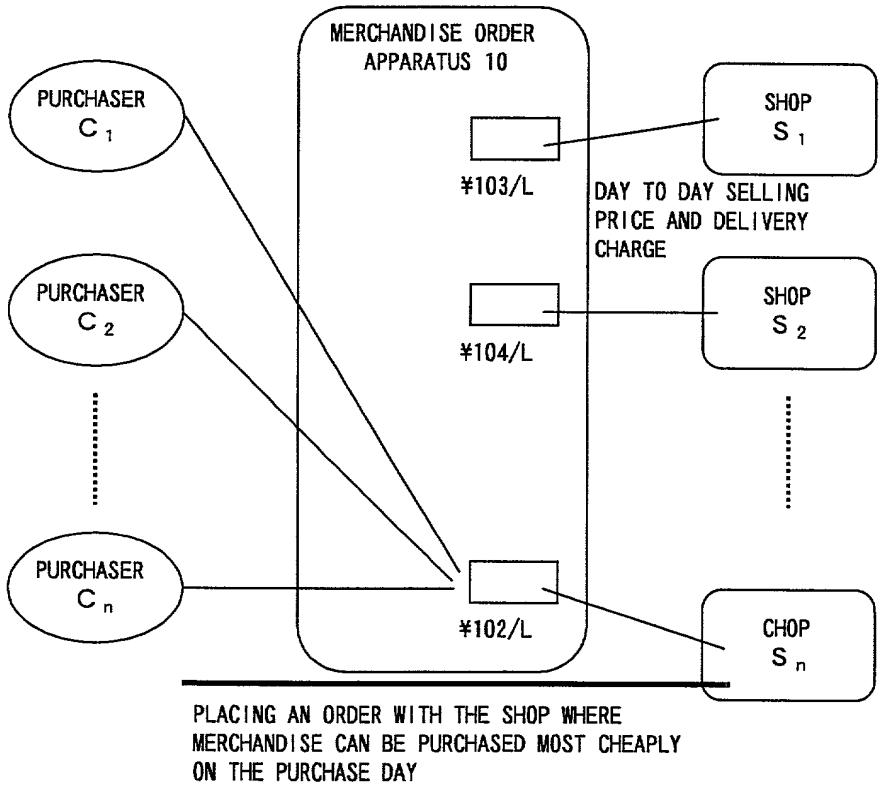

MERCHANDISE ORDER APPARATUS 10
PURCHASER C 1
PURCHASER C 2
PURCHASER C n
SHOP S 1
SHOP S 2
CHOP S n
¥103/L
¥104/L
¥102/L
DAY TO DAY SELLING PRICE AND DELIVERY CHARGE
PLACING AN ORDER WITH THE SHOP WHERE MERCHANDISE CAN BE PURCHASED MOST CHEAPLY ON THE PURCHASE DAY

FIG. 3

TELEPHONE NO. TABLE 20

TELEPHONE NO.	PURCHASER NO.
××−××××−××××	00001
××−○○○○−××××	00002
×○−××××−○○○○	00003
○○−○○○○−××××	00004
⋮	⋮

FIG. 4

PURCHASER DATABASE 21

PURCHASER NO.	PURCHASER NAME	PURCHASER ADDRESS	ADJUSTMENT COEFFICIENT	TANK CAPACITY (FULL)
00001	○○○△△	1-2-3 ××××, TOKYO	0.5	250 ℓ
00002	△△△△△△	31-6 ××××, TOKYO	0.8	198 ℓ
・ ・ ・	・ ・ ・	・ ・ ・	・ ・ ・	・ ・ ・

FIG. 5

PURCHASE HISTORY FILE 22

PURCHASER NO.	PREVIOUS PURCHASE DATE	CURRENT PURCHASE DATE
00001	2000. 1. 15	2000. 2. 10
00002	2000. 1. 4	2000. 2. 5
⋮	⋮	⋮

FIG. 6

SHOP SELLING PRICE TABLE 26

			PRICE FLUCTUATION TABLE OF THIS MONTH				PRICE FLUCTUATION TABLE OF THE NEXT MONTH			
SHOP NO.	SHOP NAME	DELIVERY CHARGE	1ST	2ND	···	31ST	1ST	2ND	···	31ST
00001	SHOP A	¥ XX	¥ YYY	¥ YYY	···	¥ ZZZ	¥ ZZZ	¥ 000	···	¥ PPP

SHOP DELIVERY CHARGE TABLE 27

		DELIVERY CHARGE FOR EACH AREA			
SHOP NO.	SHOP NAME	AREA A	AREA B	···	AREA Z
00001	SHOP A	¥ CCC	¥ VVV	···	¥ KKK

SHOP DATABASE 23

FIG. 7

AREA SELLING PRICE TABLE 28

		PRICE FLUCTUATION TABLE OF THIS MONTH				PRICE FLUCTUATION TABLE OF THE NEXT MONTH			
SHOP NAME	DELIVERY CHARGE	1ST	2ND	···	31ST	1ST	2ND	···	31ST
SHOP A	¥ XX	¥ YYY	¥ YYY	···	¥ ZZZ	¥ ZZZ	¥ 000	···	¥ PPP
SHOP B	¥ LL	¥ MMM	¥ NNN	···	¥ NNN	¥ QQQ	¥ QQQ	···	¥ RRR

AREA DELIVERY CHARGE TABLE 29

	DELIVERY CHARGE FOR EACH AREA			
SHOP NAME	AREA A	AREA B	···	AREA Z
SHOP A	¥ CCC	¥ VVV	···	¥ KKK
SHOP B	¥ LLL	¥ EEE	···	¥ UUU
·	·	·	·	·

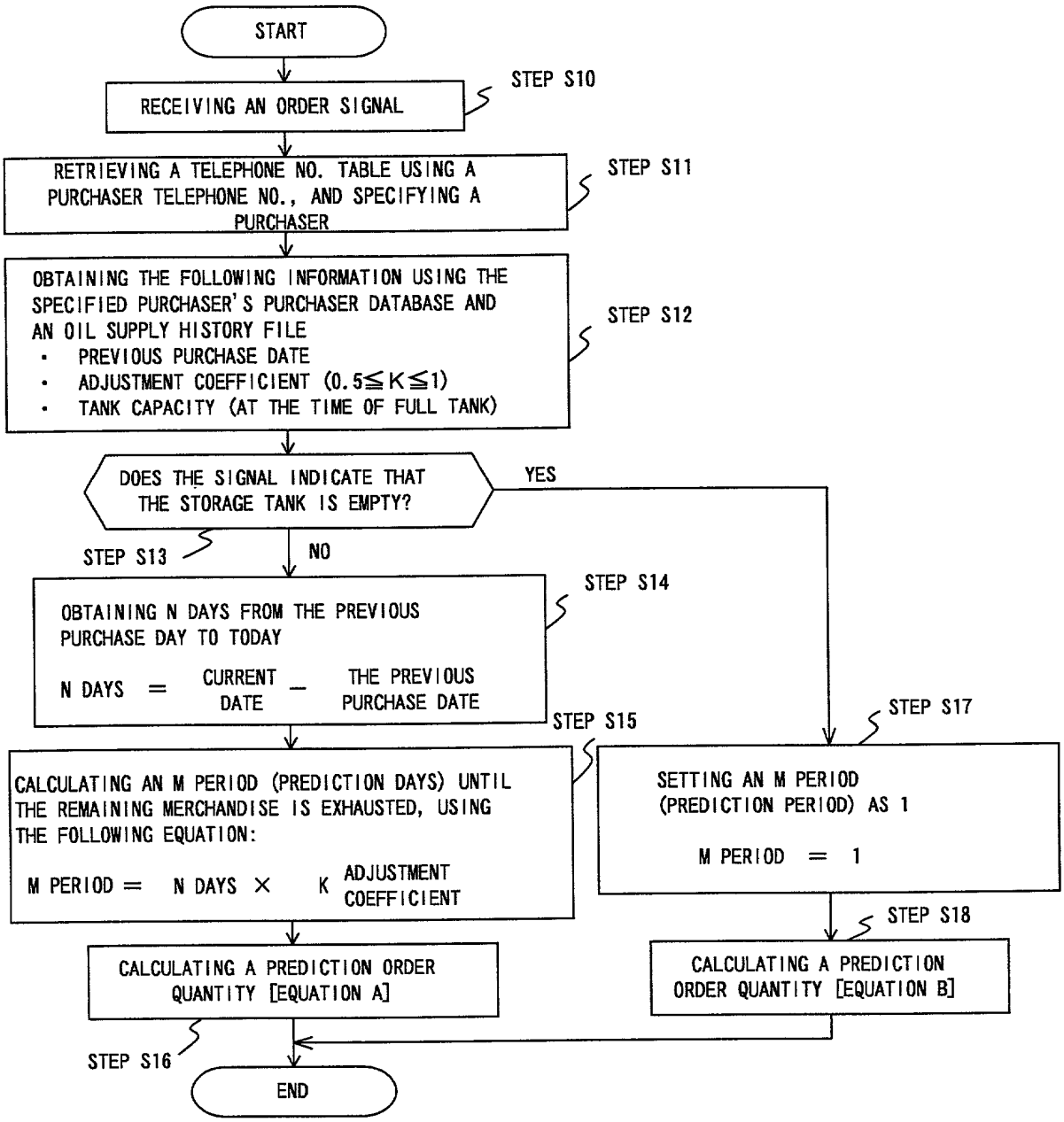
AREA DATABASE 24

FIG. 8

ORDER DATABASE 25

PURCHASER NO.	SHOP NAME	SCHEDULED PURCHASE DATE	ORDERED/ NOT-ORDERED	PREDICTION ORDER QUANTITY
00001	SHOP A	2000. 2. 20	NOT-ORDERED	150 ℓ
00002	SHOP B	2000. 1. 25	ORDERED	170 ℓ
⋮	⋮	⋮	⋮	⋮

FIG. 9



[EQUATION A]
CALCULATING A PREDICTION ORDER QUANTITY WHEN THE MERCHANDISE REMAINING QUANTITY IS HALF

MERCHANDISE CONSUMPTION QUANTITY PER ONE DAY : F

$$F = \frac{\text{FULL TANK } (\ell)}{2} \div \text{N DAYS}$$

PREDICTION ORDER QUANTITY : R

$$R_{(\ell)} = \frac{\text{FULL TANK } (\ell)}{2} + \text{M DAYS} \times F$$

[EQUATION A]
CALCULATING A PREDICTION ORDER QUANTITY WHEN THE MERCHANDISE REMAINING QUANTITY IS ZERO

PREDICTION ORDER : R

$$R = \text{FULL TANK } (\ell)$$

FIG. 10

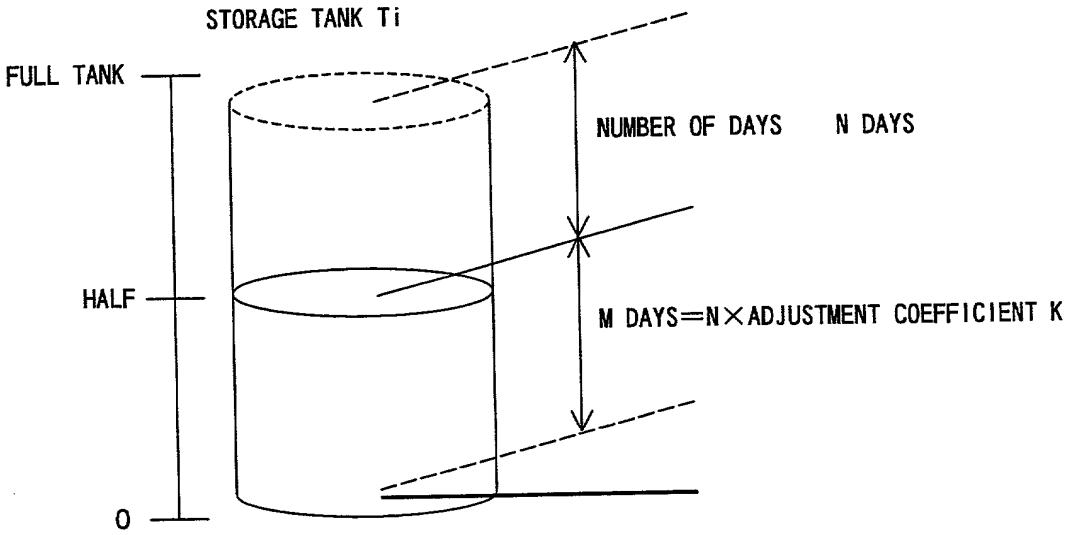

STORAGE TANK Ti
FULL TANK
HALF
0
NUMBER OF DAYS N DAYS
M DAYS=N×ADJUSTMENT COEFFICIENT K

FIG. 11

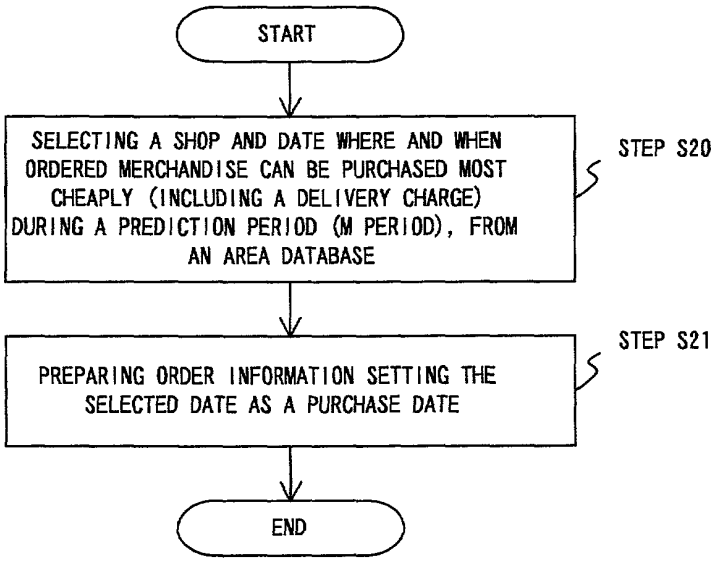

START
SELECTING A SHOP AND DATE WHERE AND WHEN ORDERED MERCHANDISE CAN BE PURCHASED MOST CHEAPLY (INCLUDING A DELIVERY CHARGE) DURING A PREDICTION PERIOD (M PERIOD), FROM AN AREA DATABASE
STEP S20
PREPARING ORDER INFORMATION SETTING THE SELECTED DATE AS A PURCHASE DATE
STEP S21
END

FIG. 12

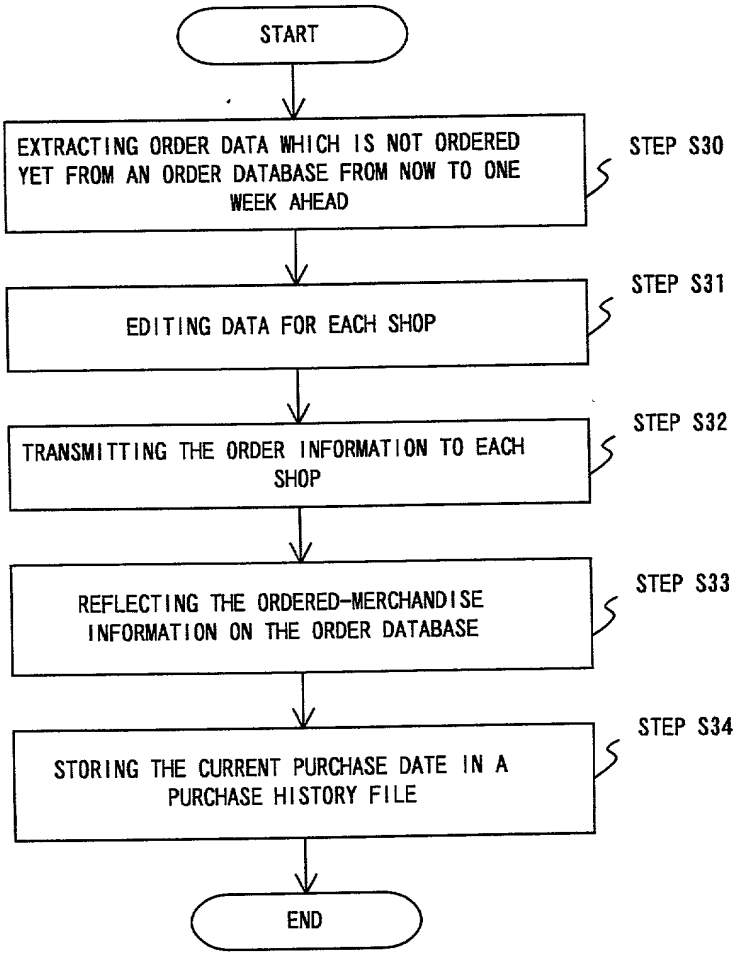

START
EXTRACTING ORDER DATA WHICH IS NOT ORDERED YET FROM AN ORDER DATABASE FROM NOW TO ONE WEEK AHEAD
STEP S30
EDITING DATA FOR EACH SHOP
STEP S31
TRANSMITTING THE ORDER INFORMATION TO EACH SHOP
STEP S32
REFLECTING THE ORDERED-MERCHANDISE INFORMATION ON THE ORDER DATABASE
STEP S33
STORING THE CURRENT PURCHASE DATE IN A PURCHASE HISTORY FILE
STEP S34
END

FIG. 13

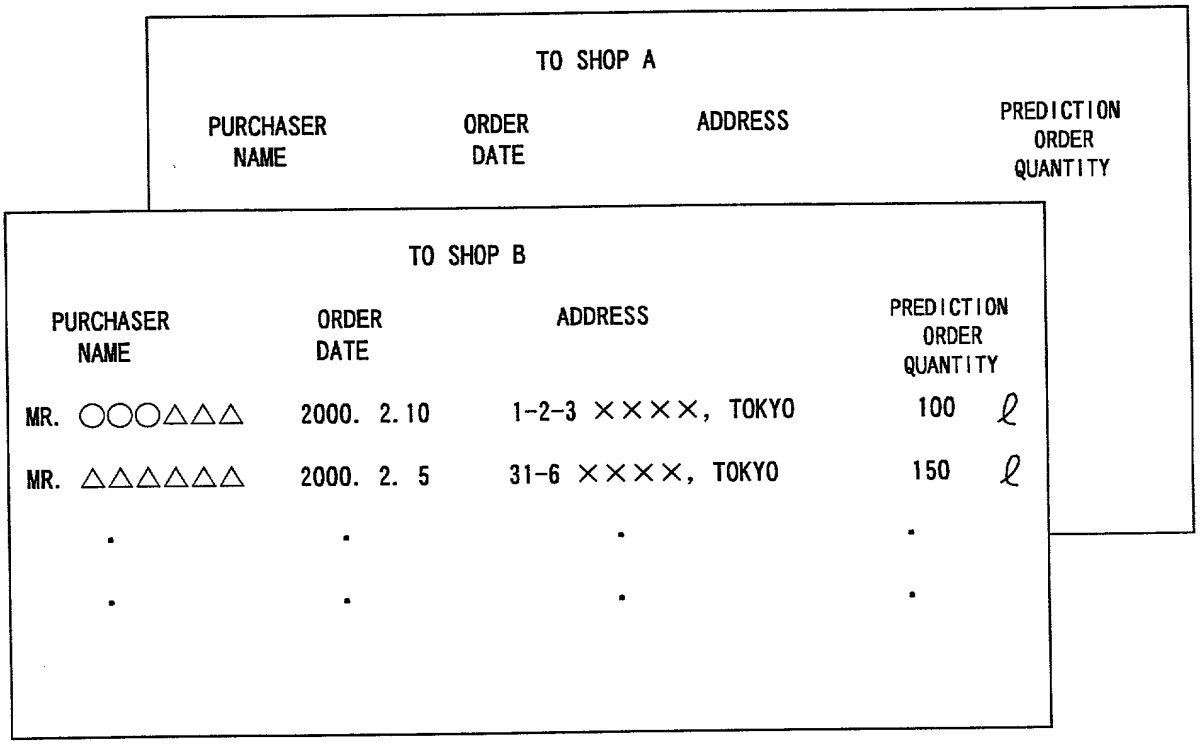

TO SHOP A
PURCHASER NAME
ORDER DATE
ADDRESS
PREDICTION ORDER QUANTITY
TO SHOP B
PURCHASER NAME
ORDER DATE
ADDRESS
PREDICTION ORDER QUANTITY
MR. ○○○△△△
2000. 2.10
1-2-3 ××××, TOKYO
100 ℓ
MR. △△△△△△
2000. 2. 5
31-6 ××××, TOKYO
150 ℓ

FIG. 14

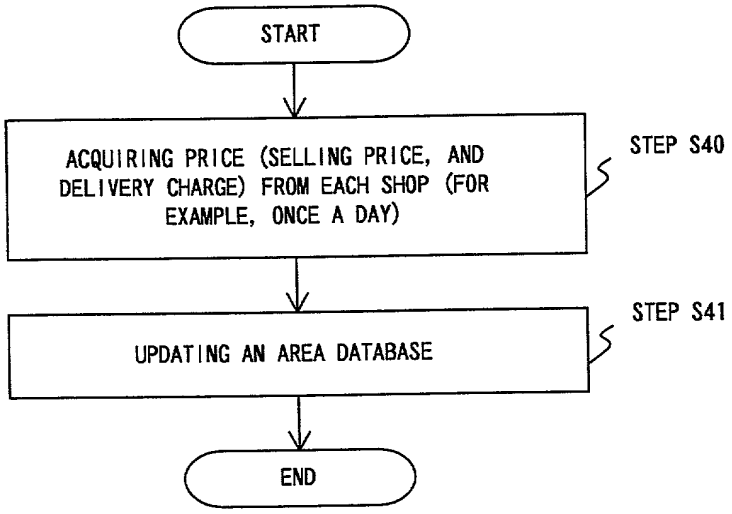

START
ACQUIRING PRICE (SELLING PRICE, AND DELIVERY CHARGE) FROM EACH SHOP (FOR EXAMPLE, ONCE A DAY)
STEP S40
UPDATING AN AREA DATABASE
STEP S41
END

FIG. 15

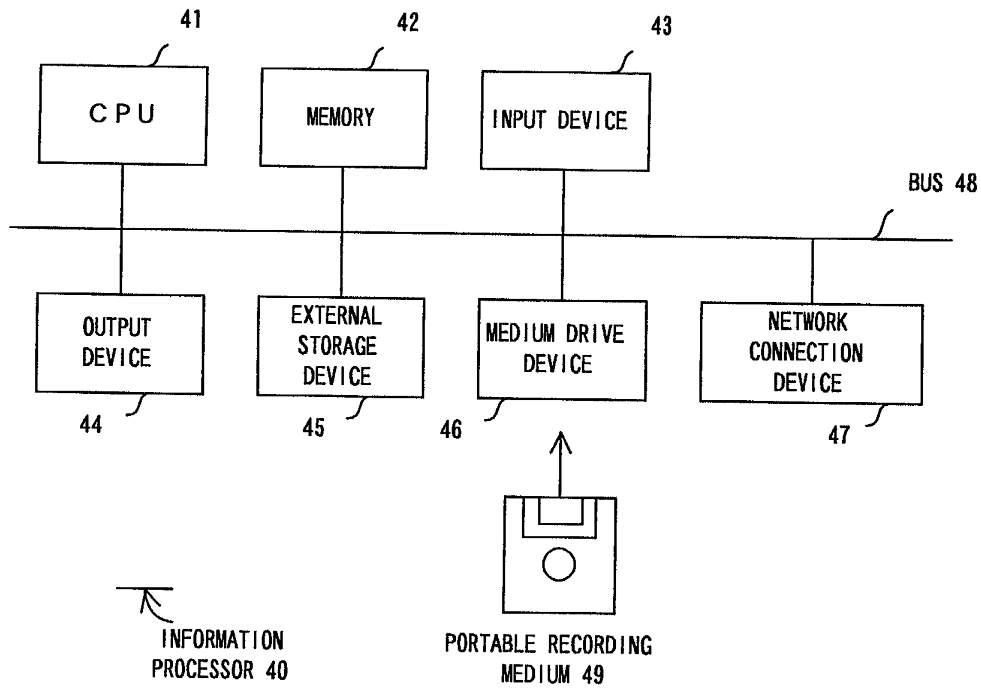

41
42
43
CPU
MEMORY
INPUT DEVICE
BUS 48
OUTPUT DEVICE
EXTERNAL STORAGE DEVICE
MEDIUM DRIVE DEVICE
NETWORK CONNECTION DEVICE
44
45
46
47
INFORMATION PROCESSOR 40
PORTABLE RECORDING MEDIUM 49

FIG. 16

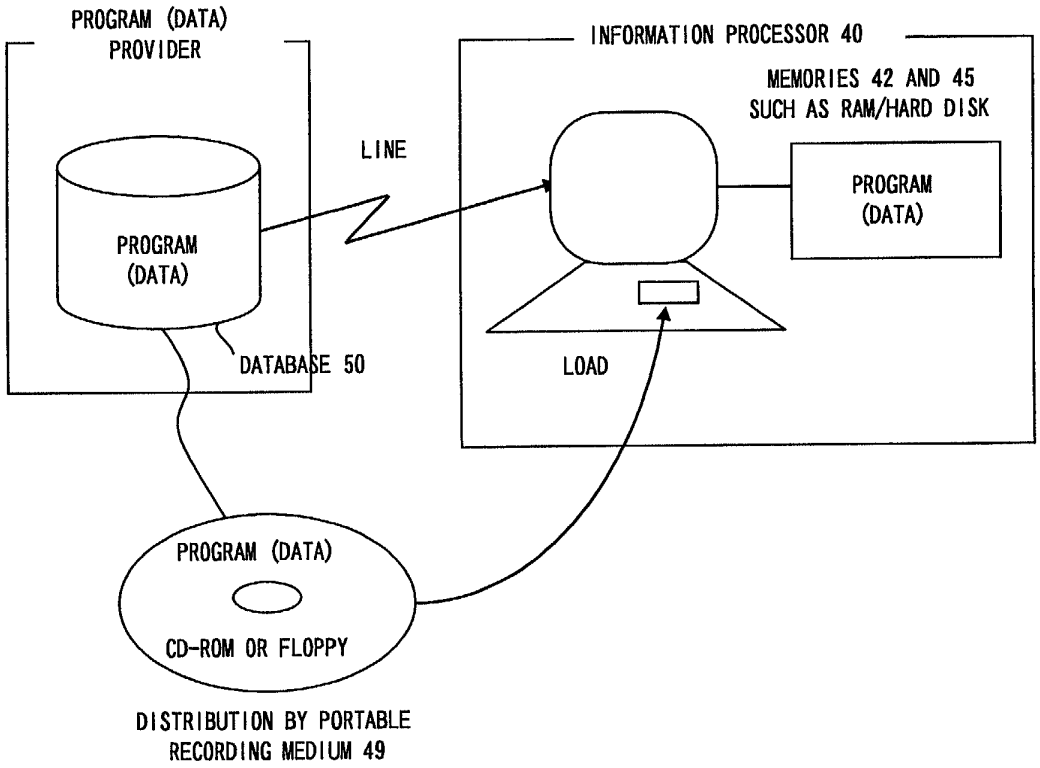


FIG. 17